

WHAT IS CLAIMED IS:

1. A process for producing a fluorinated and silylated derivative exhibiting a bond between a carbon
5 carrying at least one fluorine and a silicon, characterized in that it comprises a stage where a derivative of formula (I) $Rf-Y-O-D$ is brought into contact with a base, in said formula (I):

- 10 - Rf represents a hydrocarbon group having from 1 to 15 carbon atoms comprising at least one fluorine atom on the carbon in the α position with respect to Y ,
- 15 - D is chosen from silylated radicals,
- 15 - and where Y is chosen from carbonyl and aminoalkylene groups.

2. The process as claimed in claim 1, characterized in that Y is an aminoalkylene of formula:



where the two R groups, which are identical or different, are such that HNR_2 is an optionally cyclic secondary amine advantageously of at most 10 carbon atoms and where R' is hydrogen or else an aliphatic radical (that is to say, the open bond of which is carried by an optionally functionalized sp^3 carbon) or aromatic radical (open bond carried by an intracyclic carbon of an aromatic ring) advantageously of at most 30 10 carbon atoms, preferably of at most 6.

3. The process as claimed in claim 1, characterized in that Y is carbonyl.

35 4. The process as claimed in one of claims 1 to 3, characterized in that D corresponds to the formula $Si(R_1)(R_2)(R_3)$ (III) with R_1 , R_2 and R_3 , which are identical or different, being chosen from aryls,

alkyls, alkyloxyls or halogens, preferably chlorine or fluorine.

5. The process as claimed in one of claims 1 to 3,
5 characterized in that D corresponds to the formula
Si(R₁)(R₂)(R₃) (III) with R₁ and R₂, which are identical
or different, being chosen from aryls or alkyls and R₃
being chosen from aryls, alkyls and also from alkyloxyl
radicals.

10

6. The process as claimed in one of claims 1 to 5,
characterized in that Rf represents the hydrocarbon
group having from 1 to 10 carbon atoms and more
preferably from 1 to 4 carbon atoms.

15

7. The process as claimed in claim 6, characterized
in that Rf is chosen from trifluoromethyl,
pentafluoroethyl, heptafluoropropyls and nonafluoro-
butyls.

20

8. The process as claimed in claim 7, characterized
in that Rf is trifluoromethyl.

25

9. The process as claimed in one of claims 1 to 8,
characterized in that the base is a weak base and such
that the pKa of the associated acid is at most equal to
7, advantageously to 5, preferably to 3, more
preferably to 1.

30

10. The process as claimed in one of claims 1 to 9,
characterized in that the base is a weakly silicophilic
basic anion.

35

11. The process as claimed in one of claims 1 to 10,
characterized in that said base is such that, when
1 mole of trimethylsilyl trifluoroacetate is brought
into contact with 1/10th of an equivalent of basic
anions in anhydrous DMF, a silylated ratio (basic anion
initially present - free trifluoroacetate)/(free

trifluoroacetate) at least equal to 1/50th, advantageously to 1/10th, preferably to 1/5th, preferably to $\frac{1}{2}$, is obtained at thermodynamic equilibrium.

5

12. The process as claimed in one of claims 9 to 11, characterized in that the molar ratio of the base, expressed in equivalents, (numerator) to the derivative of formula (I) is at least equal to 0.005, 10 advantageously to 0.01, preferably to 0.02.

13. The process as claimed in one of claims 9 to 12, characterized in that the molar ratio of the base, expressed in equivalents, (numerator) to the derivative 15 of formula (I), expressed in moles, is at most equal to 2, advantageously to 0.5, preferably to 0.2.

14. The process as claimed in one of claims 1 to 13, characterized in that the reaction is carried out in a 20 medium chosen from aprotic solvents, ionic solvents and molten salts, as well as their mixture.

15. The process as claimed in claim 14, characterized in that said medium comprises a concentration of 25 acid(s) with a pKa of less than 20, advantageously than 25, preferably than 30, of at most equal to 1000 ppm in moles with respect to the moles of solvent(s).

16. The process as claimed in one of claims 1 to 15, 30 characterized in that the reaction is carried out in a polar aprotic solvent, the donor number DN of which is at least equal to 10, advantageously to 20.

17. The process as claimed in one of claims 1 to 16, 35 characterized in that the reaction is carried out in a polar aprotic solvent, the dielectric constant ϵ of which is at least equal to 10, advantageously to 15.

18. The process as claimed in one of claims 3 to 17, characterized in that the reaction is carried out at a temperature such that the reaction, symbolized by the equation below, takes place

5



19. The process as claimed in one of claims 1 to 18, characterized in that the pressure is chosen so as to be at least equal to atmospheric pressure.

10

20. A reagent which comprises, for successive or simultaneous addition:

- a weak base which is weakly silicophilic,
- a compound of formula (I) with Y being a carbonyl;
- 15 - a solvent, the boiling point of which is at least equal to 100°C, advantageously greater than 120°C, advantageously between 130°C and 170°C, more preferably from 130°C to 150°C.